

Appln No. 10/815,622
Amdt. Dated November 9, 2004
Response to Office action of September 7, 2004

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REMARKS/ARGUMENTS

The Office Action has been carefully considered. The issues raised are traversed and addressed below with reference to the relevant headings and paragraph numbers appearing under the Detailed Action of the Office Action.

Priority

The Examiner has noted in paragraph 1 that certified copies of Australian applications 2003901617 and 2003901795 have not been filed with the USPTO. In order to overcome this objection we enclose certified copies of these applications.

Specification

The Examiner has objected to the disclosure in paragraphs 2 and 4 of the Office Action, due to:

- co-pending applications are listed with attorney numbers; and,
- the abstract contains a typographical error.

In order to overcome these objections, we have amended the specification and abstract appropriately.

Claim Objections

The Examiner has objected to a number of claims, suggesting alternate wording of the respective claims. We have amended the claims in accordance with the Examiner's suggestions, and as such the claims have been corrected appropriately. Claims 52 and 53 have also been cancelled.

Claim Rejections – 35USC § 102

In this section, the Examiner has rejected claims 1 to 7, 9 to 24, 29 to 38 and 52 to 70 as not being novel in light of Wilz, Sr. et al (US 6,772,949), hereinafter referred to as Wilz Sr. et al. However, we respectfully submit that this is not the case since Wilz Sr. et al fails disclose a product item positioned substantially in contact with the housing.

Wilz Sr. et al discloses a reading device that is operated at a large distance from the bar code which is to be sensed, as illustrated by Figure 5D, and as also suggested in Figure 5A.

As further evidence of this, Wilz Sr. et al discloses in column 44 that bar codes are read by the reading device. Typically, bar codes are approximately 2 inches in width by 1 inch in height, so for the system described by Wilz Sr. et al to be capable of scanning the entire bar code, the scanning device must be positioned at a large distance from the bar code. Taking into consideration the requirements of the IR-based object detection field 9, the laser-based bar code reading field 11, and the laser-based bar code detection field 10 illustrated in Figure 5A, it is apparent that the sensing device described by Wilz Sr. et al has a large depth of field, and can only operate at large distances from the coded data that is being sensed.

However, this is in total contrast to the current reading device, which is capable of sensing a product which is substantially in contact with the housing. This is because of "*the smallness of the field of view required to acquire a Hyperlabel tag, i.e. of the order of 5 mm*", as described at lines 22 and 21 of page 75. Thus, the current sensing device can use a relatively small field of view, allowing a corresponding a small depth field to be used. This in turn allows a more compact imaging unit, to be used, whilst allowing for products to be sensed whilst substantially in contact with the housing. In other words while the product is grasped,

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as described at lines 23 to 26 of page 75 of the current specification. This is not possible using the reading device taught by Wilz Sr. et al, as the sensing device could not sense an entire bar code if it is in contact with the product item.

A further benefit of the claimed system is that it reduces the number of false scans. In particular, as the system of Wilz Sr. et al scans bar codes at a large distance, it is easy for the user to inadvertently point the scanner at a bar code, which causes the scanner to register a scan event.

In contrast, the small depth of field, and the requirement for the product item to be substantially in contact with the housing vastly reduces the chance of inadvertent scan events.

Therefore, we respectfully submit that the claim 1 is novel and inventive in light of Wilz Sr. et al.

In the event that the Examiner is minded to not accept the above arguments, we have also included new independent claims 71, 72, 73 and 74, which include further features which are not taught or suggested by Wilz Sr. et al. These claims are based on a combination of original claims 56 and 8, and 56 and 10, and corresponding method claims.

Dependent claim 8 and new independent claims 71 and 74 specify that the reading device, in use, includes an aperture being positioned on the underside of the user's finger. The Examiner has asserted that this feature in claim 8 would be obvious for one of ordinary skill in the art, since the applicant has not disclosed that this solves any stated problem or is for any particular purpose. However, we respectfully submit that this is not the case, and that a number of alleviated problems and advantages of positioning the aperture on the underside of the user's finger are disclosed throughout the specification.

For example, at lines 18 to 22 of page 75, the glove scanner is described as being *"particularly suited to automatic scanning of stock during handling"* and *"unlike other glove-mounted bar code scanners which image in a direction parallel to the outstretched finger [as in Wilz Sr. et al], the Hyperlabel glove scanner images in a direction normal to the underside of the grasping finger"*. Thus, because the aperture is positioned on the underside of the finger, the user is able to automatically scan stock *"during handling"* of the product, in other words the product is scanned whilst it is held in the user's hand.

Wilz Sr. et al discloses at lines 6 to 34 of column 44 and Figure 5D, an operator using a bar code symbol reading device supported on the finger. Wilz Sr. et al explicitly discloses that the finger-supported bar code symbol reading device is pointed to a bar code symbol. As seen in Figure 5D it can be seen that the pointing of the finger supported reading device is parallel to the outstretched finger. Thus, this device only allows scanning parallel to an outstretched finger, and not in a direction normal to the underside of a finger. Wilz Sr. et al fails to teach or suggest a reading device, which in use is capable of sensing coded data using an aperture positioned on the underside of the user's finger.

By providing an aperture on the underside on the finger, that allows automatic scanning of products when the product is picked up by a user. This is a significant advantage over Wilz Sr. et al, particularly in the area of supermarket shopping, where the user handles when purchasing. Using the system described by Wilz Sr. et al provides a two step process would be required involving scanning the product, and then handling the product to place it in a

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receptacle. However, using the current system, the user may simultaneously scan and place the product in a receptacle in one step, and as such the process is performed much more efficiently compared to Wilz Sr. et al. Furthermore, providing the aperture on the underside of the finger provides a higher degree of ease of use for the user, as a user must align the laser in Wilz Sr. et al with the bar code. Therefore we respectfully submit that claims 8, 71 and 74 are novel and inventive in light of Wilz Sr. et al.

Dependent claim 10 and new independent claims 72 and 73 specify that the reading device, in use, provides the aperture positioned so as to allow the sensor to sense coded data when the user grasps a product item. This feature is not taught or suggested by Wilz Sr. et al. In Figure 5D, Wilz Sr. et al depicts the user standing at a set distance from the product which is to be scanned, and as such Wilz Sr. et al fails to suggest that the product may be grasped by the user whilst the coded data on the product is scanned. Due to the small depth of view provided in the reading device, the coded data can be read while the product is being grasped, which is impossible using the system taught by Wilz Sr. et al which requires a large field of view (as discussed above) and which will scan in a direction away from the product item when it is grasped. Therefore, we respectfully submit that claims 10, 72 and 73 are novel and inventive in light of Wilz Sr. et al.

Dependent claim 19 specifies that the sensed coded data encodes an EPC associated with the product item, and wherein the processor determines the EPC. As described at lines 14 to 21 of page 6, *"the unique EPC of the item prevents the product being recorded as a sale more than once"*, since the scanner may perform tens or even hundreds of scans automatically. Thus using an EPC allows for the sensing process to be partially or fully automated, therefore preventing a product being scanned more than once. However, although Wilz Sr. et al describes automatic detection of bar codes, it does not suggest or teach any method which prevents multiple scans from being recorded. Therefore, we respectfully submit that claim 19 is also novel and inventive in light of Wilz Sr. et al. Similar arguments also apply to claims 20, 23 and 24.

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CONCLUSION

In light of the above, it is respectfully submitted that the objections and claim rejections have been successfully traversed and addressed. The amendments do not involve adding any information that was not already disclosed in the specification, and therefore no new matter is added. Accordingly, it is respectfully submitted that the pending claims and the application as a whole with these claims, are allowable, and a favourable reconsideration is therefore earnestly solicited.

Very respectfully,

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